

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) An apparatus for displaying a hierarchical structure of a plurality of classes, comprising:

a memory configured to hierarchically store a database for ~~[[a]]~~ the plurality of classes each having properties ~~a property~~, each class representing a concept characterized by the properties, the properties ~~property~~ of a parent class in the plurality of classes being inherited to ~~[[a]]~~ each child class belonging to the parent class;

a display configured to output a first area of the parent class and a second area of ~~[[the]]~~ each child class, the first area including all of the second area of each child class to indicate an inclusion relationship between the parent class and the child class; and

an operation unit configured to select the first area or the second area on said display;

wherein, when said operation unit selects the second area, said display outputs a list of properties of the child class, the list including the properties ~~property~~ of the parent class.

2. (Original) The apparatus according to claim 1, wherein said display outputs all of the first area including all of the second area.

3. (Previously Presented) The apparatus according to claim 1, wherein said display outputs class information related to the parent class or the child class in response to a selection from said operation unit.

4. (Currently Amended) The apparatus according to claim 3, wherein said display outputs a list of the properties of the parent class when said operation unit selects the first area.

5. (Currently Amended) The apparatus according to claim 4, wherein said display outputs property information related to one property from the list of properties when said operation unit selects the one property from the list of properties.

6. (Original) The apparatus according to claim 1, wherein said display outputs a mark in correspondence with each class of the first area and the second area, and wherein the mark represents that a corresponding class hierarchically includes a child class.

7. (Previously Presented) The apparatus according to claim 6,

wherein said operation unit indicates whether an area of the child class is displayed in an area of the corresponding class.

8. (Original) The apparatus according to claim 7, wherein a status of the mark of the corresponding class of which the area of the child class is displayed is different from a status of the mark of the corresponding class of which the area of the child class is not displayed.

9. (Original) The apparatus according to claim 8, wherein a status of the mark of the corresponding class of which the child class has an instance is different from a status of the mark of the corresponding class of which the child class does not have an instance.

10. (Original) The apparatus according to claim 9, wherein said display outputs another mark in corresponding with the child class which has the instance.

11. (Original) The apparatus according to claim 7, wherein said operation unit selects a class to display direct classes from the plurality of classes, and wherein said display outputs the direct classes to which the class belongs.

12. (Original) The apparatus according to claim 7, wherein said operation unit sets a universal root class commonly including a first hierarchical structure derived from a first root class and a second hierarchical structure derived from a second root class.

13. (Previously Presented) The apparatus according to claim 7,
wherein said operation unit sets a retrieval start point to the parent class of the first area on said display, and
wherein a retrieval object is limited to the child class having the instance.

14. (Previously Presented) The apparatus according to claim 13, wherein said operation unit sets the retrieval start point to a class including at least two child classes each having an instance.

15. (Currently Amended) The apparatus according to claim 5, wherein the child class inherits at least one property of each of ~~[[the]]~~ a plurality of parent classes in the plurality of classes stored in said memory.

16. (Original) The apparatus according to claim 15, wherein a display status of the child class inheriting at least one property of each of the plurality of parent classes is different from a display status of another child class not inheriting at least one property of each of the plurality of parent classes.

17. (Original) The apparatus according to claim 16, wherein said operation unit indicates a reference of an inheritance source class of one property of the child class inheriting at least one property of each of the plurality of parent classes, and wherein the inheritance source class is one of the plurality of parent classes.

18. (Original) The apparatus according to claim 5, wherein a color of a property in the list of properties of the child class as an inheritance destination class is the same as a color of the parent class having the property as the inheritance source class.

19. (Original) The apparatus according to claim 1, wherein said operation unit sets a number of hierarchical levels for a plurality of classes at an initialization mode to display the hierarchical structure of the plurality of classes.

20. (Original) The apparatus according to claim 19, wherein said operation unit sets an identifier of each class to be expansibly displayed in the plurality of classes at the initialization mode.

21. (Currently Amended) A method for displaying a hierarchical structure of a plurality of classes, comprising:

hierarchically storing a database for ~~[[a]]~~ the plurality of classes each having ~~properties a-property~~, each class representing a concept characterized by the properties, the properties ~~property~~ of a parent class in the plurality of classes being inherited to ~~[[a]]~~ each child class belonging to the parent class;

displaying a first area of the parent class and a second area of each ~~[[the]]~~ child class belonging to the parent class, the first area including all of the second area of each child class to indicate an inclusion relationship between the parent class and the child class;

selecting the second area displayed; and

displaying a list of properties of the child class, the list including the property of the parent class.

22. (Currently Amended) A computer readable medium storing a computer readable program code for causing a computer to display a hierarchical structure of a plurality of classes, said computer readable program code comprising:

instructions for a first program code to hierarchically store a database for ~~[[a]]~~ the plurality of classes each having ~~properties a-property~~, each class representing a concept characterized by the properties, the properties ~~property~~ of a parent class in the plurality of classes being inherited to ~~[[a]]~~ each child class belonging to the parent class;

instructions for a second program code to display a first area of the parent class and a second area of ~~[[the]]~~ each child class, the first area including all the second area

of each child class to indicate an inclusion relationship between the parent class and the child class;

instructions for a third program code to select the second area displayed; and

instructions for a fourth program code to display a list of properties of the child class, the list including the properties property of the parent class.